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[Continued on next page]

(54) Title: GAMMA-BUTYROBETAINE HYDROXYLASE ORIGINATED FROM NEUROSPORA CRASSA

49 kDa

Lane 1: Protein molecular size marker, Lane 2: E.coll BL21 w/o g -BBH gene,

γ-BBH encoded by the polynucleotide, and a method of preparing L-camitine, which comprises hydroxylating γ-butyrobetaine using

Lane 3: E.coll BL21 w/g -BBH gene and induced by 1mM IPTG (57) Abstract: Disclosed is a polynucleotide encoding γ-butyrobetaine hydroxylase (γ-BBH) originating from Neurospora crassa. Also disclosed are a recombinant vector comprising the polynucleotide, a transformant transformed with the recombinant vector,

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Y-BBH encoded by the polynucleotide.

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